

TWC HAB System Plan Ecology's Perspective

Sept. 11, 2013

Ecology Concerns - WTP

- I. Current concerns regarding WTP/waste feed:
 - a) Unknown scope
 - b) Recognized scope with no defined path forward
 - c) Recognized scope with set path forward

Ecology Concerns -Tank Farms

I. Current concerns regarding tank farms

- a) Limited DST space
- b) Leaking DST AY-102
- c) Leaking SSTs with no infrastructure
- d) Impacts to groundwater
- e) Vadose zone remediation
- f) Aging tanks

Current Situation

1. Current CD and TPA milestones fixed
2. Leak response required for DSTs and SSTs
3. WTP construction completion required
4. USDOE plan not revealed yet
5. Adequate Funding uncertainties over time
6. ICD-19 requirements in question
7. Integration with TOC and WTP necessary

Ecology WTP Concerns

- I. Uncertainty in **waste feed delivery** to WTP
 - a. blending – details necessary (ex. Solids loading and settling, identifying constituents of concern, flow features)
 - b. Treatment process (ex. Hydrogen in vessels, mixing, particle distribution)
2. **DNFSB 2010-2 recommendations** –remain unresolved
 - a. Awaiting updated resolution plan
3. Need to understand **resolution plans** to evaluate assumptions and then uncertainty.
 - a. Uncertainty can be valued and modeled with proper assumptions
4. **WTP actual operations start up date**
 - a. Many uncertainties remain.

Ecology preferred System Plan Rev. 7 model runs

1. US DOE Baseline Case
2. CD and TPA compliant case
3. WTP enhanced glass with blending and conditioning
4. Direct waste feed to LAW with blending and conditioning
5. Tank Farm SST waste retrieval schedule maintained to compliance dates
6. Develop proper waste retrieval and feed for WTP
7. Contingency plans for tank farms and WTP

Opportunities to achieve better outcomes

1. Create clear assumptions
2. Define and acknowledge uncertainties
3. Ensure work is compliant
4. Understand DOE FY 14 plan and beyond

Extra slides follow

SP Rev. 7 assumptions questions/concerns

1. What are details on blending and conditioning facility?
2. Evaluate tank failure and number of tanks out of commission
3. Justify WTP/waste blending needs

Ecology Assumptions

I. WTP

1. Enhanced glass formula
2. Direct feed to LAW

2. Tank Farms

1. Continued SST waste retrieval
2. Model SST and DST failures